# Rule 1.6. Indiana Electrical Code, 2002 Edition

# **Adoption by reference**

Sec. 1. That certain document, being titled as National Electrical Code, 2002 edition, First printing and Errata to the First Printing (Errata date January 18, 2002), both published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts 02269, is hereby incorporated by reference and made a part of this rule, except those portions as are amended and adopted in sections 3 through 26 of this rule.(675 IAC 17-1.6-1) Eff: September 13, 2002

### Title; availability

Sec. 2. (a) This rule shall be known as the Indiana Electrical Code, 2002 edition, and shall be published, except for incorporated documents, by the fire and building services department for general distribution and use under the title. Whenever the term  $\forall$ this code $\forall$  is used within this rule, including incorporated documents, it shall mean the Indiana Electrical Code.

(b) This rule, with the incorporated National Electrical Code, 2002 edition, is available for review and reference at the Fire and Building Services Department, 402 West Washington Street, Room W246, Indianapolis, Indiana 46204. (675 IAC 17-1.6-2) Eff: September 13, 2002

#### Article 80; administration and enforcement

Sec. 3. Article 80 is deleted in its entirety without substitution. (675 IAC 17-1.6-3) Eff: September 13, 2002

#### Section 90.2; scope

Sec. 4. Section 90.2 is amended to read as follows: (A) Covered. This code covers: Installations of electric conductors and equipment within or on Class 1 and Class 2 structures, including industrialized building systems, and other premises wiring covered by rules of the Commission in this title.

Class 1 and Class 2 Structures covered by the Indiana Residential Code shall be made to comply with Sec. 6. Section 90.6 is deleted in its entirety

the provisions of this code, or the electrical provisions of the Indiana Residential Code (675 IAC 14).

- (B) Not Covered. This code does not cover:
- (1) Installations in ships, watercraft, railway rolling stock, aircraft, automotive vehicles, and buildings or structures that are not Class 1 or Class 2 structures.
- (2) Installations underground in mines.
- (3) Installations of railways for generation, transformation, transmission, or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communication purposes.
- (4) Installations of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.
- (5) Installations, including associated lighting under the exclusive control of electric utilities for the purpose of communication, or metering; or for the generation, control, transformation, transmission, and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors on private property by established rights such as easements.
- (6) Installations of electrical wiring, equipment, and devices, factory installed in manufactured homes under the authority of the U.S. Department of Housing and Urban Development (HUD).

(675 IAC 17-1.6-4) Eff: September 13, 2002

### Section 90.4; enforcement

Sec. 5. Section 90.4 is amended to read as follows: Requirements covering enforcement, granting of variances, and approval of alternate methods or materials are covered in Indiana statutes and 675 IAC 12, the General Administrative Rules of the Commission. (675 IAC 17-1.6-5) Eff: September 13, 2002

#### Section 90.6; formal interpretations

without substitution. (675 IAC 17-1.6-6) Eff:

September 13, 2002

# Section 90.7; examination of equipment for safety

Sec. 7. Section 90.7 is deleted in its entirety without substitution. (675 IAC 17-1.6-7) Eff: September 13, 2002

# Section 90.8; wiring planning

Sec. 8. Section 90.8 is deleted in its entirety without substitution. (675 IAC 17-1.6-8) Eff: September 13, 2002

# Section 90.9; units of measurement

Sec. 9. Delete the text of Section 90.9 and substitute the following: For the purpose of this code, the measurement system is the English (U.S. customary or inch-pound) system. Compliance with the numbers shown in the inch-pound system shall constitute compliance with this code. (675 IAC 17-1.6-9) Eff: September 13, 2002

#### **Article 100; definitions**

Sec. 10. (a) In Part 1 of Article 100, delete the text of the definition of APPROVED and substitute to read as follows: APPROVED. Acceptance by the AUTHORITY HAVING JURISDICTION by one (1) of the following methods:

- (1) investigation or tests conducted by recognized authorities; or
- (2) investigation or tests conducted by technical or scientific organizations; or accepted principles.

The investigation, tests or principles shall establish that the materials, equipment and types of construction are safe for their intended purpose.

- (b) In Part 1 of Article 100, delete the text of the definition of AUTHORITY HAVING JURISDICTION and substitute to read as follows: AUTHORITY HAVING JURISDICTION. The office of the state building commissioner authorized under IC 22-15-2-7; the office of the state fire marshal authorized under IC 22-14-2-10; the local building official authorized under IC 36-7-2-9 and local ordinance; the fire department authorized under IC 36-8-17-9.
  - (c) In Part 1 of Article 100, after the definition

if ISOLATED, add the definition of KITCHEN to read as follows: KITCHEN means an area used, or designated to be used, for the preparation of food.

(d) In Part 1 of Article 100, delete the text of the definition of SPECIAL PERMISSION and substitute to read as follows: SPECIAL PERMISSION. A variance granted by the commission under IC 22-13-2-11 or a variance granted by a political subdivision and approved by the commission under IC 22-13-2-7(b). (675 IAC 17-1.6-10) Eff: September 13, 2002

# Section 110.26; working clearances

Sec. 11. Change Section 110.26(A)(1)(b) to read as follows: When approved, smaller spaces may be permitted where all uninsulated parts are at a voltage no greater than 30 volts RMS, or 42 volts peak, or 60 volts DC. (675 IAC 17-1.6-11) Eff: September 13, 2002

# Section 210.12; arc-fault circuit-interrupter protection

Sec. 12. In Section 210.12(B), Dwelling unit bedrooms, delete  $\forall$  outlets $\forall$  and insert  $\forall$ receptacle outlets $\forall$ . (675 IAC 17-1.6-12) Eff: September 13, 2002

# Section 210.60; guest rooms

Sec. 13. The first sentence in Section 210.60(A) is amended to read as follows: Guest rooms in hotels, motels, health care facilities, and similar occupancies shall have receptacle outlets installed in accordance with Section 210.52(A) and 210.52(D). (675 IAC 17-1.6-13) Eff: September 13, 2002

#### Section 230.2; number of services

Sec. 14. (a) Change the second sentence of Section 230.2 to read as follows: For the purpose of Section 230.40, Exception No. 2 only, underground sets of conductors, size 1/0 AWG and larger, running to the same location as close as practical and connected together at their supply end, but not connected together at their load end, shall be considered to be one lateral.

(b) Amend Section 230.2(B) Special occupancies, by deleting  $\forall$ By special permission $\forall$  and inserting  $\forall$ When approved $\forall$ . (675 IAC 17-1.6-14) Eff: September 13, 2002

#### Section 230.40; service-entrance conductors

Sec. 15. Change the second Exception to Section 230.40 to read as follows: Exception No. 2: Where two to six service disconnecting means in separate enclosures are grouped as close as practical at one location and supply separate loads from one service drop or lateral, one set of service-entrance conductors shall be permitted to supply each or several such service equipment enclosures. (675 IAC 17-1.6-15) Eff: September 13, 2002

# Section 250.104; bonding of piping and exposed structural steel

Sec. 16. In (a) Amend the first third sentence of Section 250.104(B), delete ∀including gas piping, ∀ and insert ∀other than gas piping, ∀ to read: The equipment grounding conductor for the circuit that may energize the piping shall be permitted to serve as the bonding means if connected using a fixed wiring method.

**(b)** At the end of Section 250.104(B), add a sentence to read as follows: All aboveground metal gas piping upstream from the equipment shutoff valve shall be electrically continuous. (675 IAC 17-1.6-16) Eff: March 24, 2004

#### Table 314.16(A); metal boxes

Sec. 17. In the line for 4 x 1-1/4-inch round/octagonal boxes and in the column for 8AWG conductor, delete  $\forall 5\forall$  and insert  $\forall 4\forall$ . In the line for 3-: x 2 x 3-1/2-inch masonry box/gang boxes and in the column for 6AWG conductor, delete  $\forall 2\forall$  and insert  $\forall 4\forall$ . (675 IAC 17-1.6-17) Eff: September 13, 2002

#### Section 334.10; uses permitted

Sec. 18. (a) Delete the text of (2) in Section 334.10 and substitute: (2) In any building or structure not exceeding three (3) stories (see Section 362.10 for the definition of STORY).

- (a) For exposed work except as prohibited in Section 334.12.
- (b) Concealed within walls, floors, and ceilings except as prohibited in Section 334.12.
- (b) Delete the text of (3) in Section 334.10 and substitute: (3) In any building or structure exceeding three (3) stories (see Section 362.10 for the definition of STORY), Type NM, Type NMC, and

Type NMS cables shall be concealed within walls, floors, and ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating identified in listings of fire-rated assemblies. The 15-minute-finish-rated thermal barrier shall be permitted to be used for combustible walls, floors, and ceilings, except as prohibited in Section 334.12.

Exception: Where the building is provided with an approved automatic sprinkler system throughout, Type NM, Type NMC, and Type NMS cables are permitted to be used within walls, floors, ceilings, exposed or concealed, in buildings exceeding three (3) stories.

(675 IAC 17-1.6-18) Eff: September 13, 2002

# Section 334.12; uses not permitted

Sec. 19. In Section 334.12(A), delete Item 1 without substitution. (675 IAC 17-1.6-19) Eff: September 13, 2002

#### Section 362.10; uses permitted

Sec. 20. (a) Delete the first two sentences of text in Uses Permitted and substitute to read as follows: For the purpose of this Section a story is that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a usable or unused under-floor space is more than 6 feet (1,829mm) above grade for more than 50 percent of the total perimeter or is more than 12 feet (3,658mm) above grade at any point, such usable or unused under-floor space shall be considered as a story.

- (b) In Item (1) under Uses Permitted, delete  $\forall$ floors above grade $\forall$  and substitute  $\forall$ stories $\forall$ .
- (c) In Item (2) under Uses Permitted, delete  $\forall$ floors above grade $\forall$  and substitute  $\forall$ stories $\forall$ .
- (d) Delete the text of the exceptions to Items (2) and (5) and substitute to read as follows: Where the building is provided with an approved automatic sprinkler system throughout, ENT is permitted to be used within walls, floors, and ceilings, exposed or concealed, in buildings exceeding three stories. (675 IAC 17-1.6-20) Eff: September 13, 2002

# Section 362.12; uses not permitted

# Sec. 21. In Item (7) under Uses not permitted, **Section 525.5**; overhead conductor clearances

Sec. 22. Change Section 525.5(B) to read as follows: (B) Clearance to Rides and Attractions. Amusement rides and amusement attractions shall be maintained not less than 3.048m (10ft) in any direction from overhead conductors operating at 600 volts or less, except for the conductors supplying the amusement ride or attraction. Amusement rides or attractions shall not be located within 4.57m (15ft) horizontally of conductors operating in excess of 600 volts. (675 IAC 17-1.6-22) Eff: September 13, 2002

# Section 547.1; scope

Sec. 23. Change Section 547.1 to read as follows: The provisions of this section shall apply to the following agricultural buildings or that part of a building or adjacent areas of similar or like nature as specified in (A) and (B) below, unless the building is not a Class 1 structure. Agricultural buildings that are not Class 1 structures may be regulated by local ordinance. (675 IAC 17-1.6-23) Eff: September 13, 2002

# Section 550.25; arc-fault circuit-interrupter protection

Sec. 24. Delete the text of Section 550.25(B), Bedrooms of Mobile Homes and Manufactured Homes, and substitute to read as follows: All branch circuits that supply 125-volt, single-phase, 15- and 20-ampere receptacle outlets installed in bedrooms of mobile homes and manufactured homes shall be protected by an arc-fault circuit-interrupter listed to provide protection of the entire branch circuit. (675 IAC 17-1.6-24) Eff: September 13, 2002

# Section 550.4; general requirements

Sec. 25. Section 550.4(B) is amended by adding a second sentence to read as follows: Modular homes, constructed under 675 IAC 15, Industrialized Building Systems, shall comply with the provisions of Article 545 of this code. (675 IAC 17-1.6-25) Eff: September 13, 2002

# Section 600.1; scope

add 362.10(2) to the listed sections. (675 IAC 17-1.6-21) Eff: September 13, 2002

Sec. 26. Section 600.1 is amended to read as follows: This section covers the installation of conductors and equipment for electric signs and outline lighting as defined in Article 100 that are within or connected to Class 1 or Class 2 buildings or structures. (675 IAC 17-1.6-26) Eff: September 13, 2002